INTERPERSONAL BEHAVIOR PATTERNS AND THEIR RECIPROCAL IMPACT IN THERAPEUTIC DYADS

By

BRIAN EDGAR WARREN

A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA
1972

To Jo, my loving wife--she makes dissertations worth writing.

ACKNOWLEDGMENTS

The author would like to acknowledge the assistance, cooperation, and contributions of the many individuals who aided in the completion of this study. First and foremost, to the judges, Ann Willet, David Bole, Mark Tyson, Terry Proger, Bob Brozik and Tammy Cummins, go the author's deep appreciation. Without their dedication of time, energy, and expertise, there would be no data. The many, many typists who served in the transcription of the therapy tapes cannot all be mentioned, but they all deserve praise for their commitment to a tedious, time-consuming, and often boring task without which the project would have been impossible. To his Committee Chairman, Dr. Harry Grater, Jr., the author extends special thanks for his support and encouragement and for providing the author the opportunity to "cleanse his soul" in the throes of therapy research. To the other members of my committee, Drs. Hugh Davis, Franz Epting, Vernon Van De Riet, Don Avila, and especially Madeline Ramey for her invaluable advice on design and statistics, the author extends his appreciation for their interest and encouragement. Special thanks are offered to Alan Pope for his technical assistance and to the Virginia Polytechnic Institute Counseling Center for the data loan of therapy cases.

This project was supported by funds from the University of Florida Counseling Center and a special and most appreciated grant-in-aid from Mr. and Mrs. Everett Warren, the author's parents.

Finally, the author would like to express his deep love and appreciation to his wife, Jo, who served as advisor, bookkeeper, statistical assistant, transcriber, typist, and therapist to the author throughout the whole process of thinking, writing, worrying, and otherwise struggling in the completion of it all. Her love and sharing made all the effort worthwhile.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abstract of Dissertation Presented to the Graduate Council of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

INTERPERSONAL BEHAVIOR PATTERNS AND THEIR RECIPROCAL IMPACT IN THERAPEUTIC DYADS

By

Brian Edgar Warren

August, 1972

Chairman: Professor Harry A. Grater, Jr.
Major Department: Psychology

The purpose of this study was the analysis of the reciprocal effects of client-to-therapist interpersonal behavior through the examination of whole-interview sessions of psychotherapy. In addition, the patterns of interpersonal behaviors reported by clients in therapy of interactions with significant others were analyzed in relationship to the actual therapeutic interactions.

Judges were trained in the use of the Interpersonal System of Behavioral Analysis, a method derived from the interpersonal theories of Sullivan and Leary, and developed by Freedman and others. Using typescripts and accompanying audiotapes, judges rated the interpersonal behavior reflexes of clients and therapists as well as client-reported other-interactions along a circumplex continuum of 16 behavioral categories. These categories were later combined in related groups of two (octants) and four (quadrants) to test the study hypotheses.

The 12 therapy dyads were made up of eight female and four male clients being seen for personal counseling at two university counseling centers. The nine participating therapists (six male and three female) ranged in experience from practicum level counselors and psychology interns to senior staff with several years' experience. A total of 49 interviews were response analyzed.

The findings failed to support the hypotheses that client-to-therapist and therapist-to-client behaviors would become increasingly similar to the behaviors reported by the client of client to significant others and significant others to client, respectively. Overall proportions of therapist, client, and significant-other responses did indicate, however, that the patterns of the therapeutic interaction and the clients' interactions with others were quite similar.

Additional hypotheses were directed at the expected relationships of the various interpersonal categories and their reciprocal influence as suggested in the previous work of Mueller. In the analysis of circumplex quadrants, client Support-Seeking behavior was not consistently related to therapist Supportive-Interpretive behavior as expected. Likewise, client Competitive-Hostile behavior was not related to the same behaviors from therapists. Only one quadrant hypothesis was confirmed. Client Passive-Resistant behavior was negatively related to therapist Support-Seeking behavior.

When octant-level hypotheses were tested, the following significant relationships were indicated:

(1) Client Punish-Hate behavior was positively correlated with therapist categories of Boast-Reject, Punish-Hate, Complain-Distrust, and Admire-Trust and negatively related to therapist Condemn Self-Submit and Cooperate-Love octants.

(2) Client Complain-Distrust behavior was positively related to Punish-Hate and Complain-Distrust therapist behaviors.

(3) Client Admire-Trust behavior was positively correlated with therapist Punish-Hate and Support-Give while negatively related to Teach-Dominate reflexes.

(4) Client Cooperate-Love reflexes tended to elicit therapist Cooperate-Love and Condemn Self-Submit behaviors.

(5) Client Support-Give octant was negatively correlated with Punish-Hate, Complain-Distrust, Condemn Self-Submit, Cooperate-Love, and Dominate-Teach therapist responses.

(6) Client responses in the Teach-Dominate octant were negatively related to therapist Condemn Self-Submit and Cooperate-Love, while being positively correlated with Teach-Dominate behavior.

The limitations and implications of these findings were discussed in relation to previous research with the circumplex system and the literature on transference, counter-transference, and interpersonal therapy. The research potential of the methodology was reaffirmed and future research possibilities were explored.

CHAPTER I

THEORETICAL BACKGROUND AND PREVIOUS RESEARCH

Since the introduction of Harry Stack Sullivan's theory of interpersonal psychiatry over 20 years ago, the discussion and validation of interpersonal relations, and particularly the interpersonal operations of client and therapist, have gained wide popularity. A wide variety of concepts, therapeutic techniques, and empirical validation procedures have been proposed and investigated.

Sullivan's theory views psychotherapy as a specific instance of an interpersonal relationship or one of many interpersonal situations. Psychiatry as an interpersonal process is the study of relationships transpiring between people. As the key issue of psychotherapy, the alleviation of anxiety or "absolute tension" is achieved by the psychiatrist's functioning as a participant-observer in an interpersonal relationship with his client. Successful therapy engenders "euphoria," that is, a pleasant sense of security or total equilibrium. In addition to the pursuit of security as a prime goal of human behavior is the pursuit of satisfactions, resulting from the fulfillment of such biological needs as sleep, food, and sex. These satisfactions, which are essentially those of becoming a person, are derived through

the processes of socialization. "Emotional contagion," possible in interpersonal therapy as well as in other interpersonal processes, Sullivan termed "empathy," a form of emotional communication. Empathy, "the tension of anxiety, when present in the mothering one, induces anxiety in the infant," and this concept also holds true in the therapeutic interview. Anxiety is the consequence of an interpersonal situation, and satisfaction the concomitant of the relaxation of tension or the fulfillment of needs (Sahakian, 1969; Sullivan, 1947).

Essential to the understanding of the client's behavior is the recognition that the anxious interpersonal man will experience a parataxic repetition of previous experience. Such repetitions of distortion are produced by expectations which were learned from the past interactions with significant others. The client will assume that people are treating him in the same old ways. He will respond to the new situation in conformity with anxiety-reducing operations he has found successful in earlier relationships. He will tend to perpetuate the old and ineffective patterns. In any new encounter, interpersonal man responds on the basis of his eidetic images of people related to in the past rather than on the basis of the people themselves. He avoids recognizing anxiety by using his old distortions and self-deceptive maneuvers.

Thus, the problem in psychotherapy as posed in interpersonal theory is: By what means can the client learn to

elicit legitimately security-giving reactions from others? By what means can the client reduce the projection of eidetic distortions into the present? By what means can he become acquainted with his own operations in the self-deception so that he will be able to develop a flexible interpersonal awareness with conjunctive, integrative, and collaborative attitudes (Glad, 1959).

The primary objective of the interpersonal therapist, then, is to help the client recognize and thereby correct his perceptual or behavioral distortions in interpersonal relations. The therapist endeavors to lead the client into consensually valid, syntactic modes of experience. He attempts to help the client see reality in the same ways as other members of the culture do, and to express himself in such a way that he can gain affection and approval rather than in a way that he deceives himself and alienates others. Since such capacity for syntactic organization is hardly a logical problem, many emotionally constructive experiences are essential to the client's development of effectively socialized skills. Appropriate emotional reactions on the part of the therapist are essential to such relearning (Glad, 1959).

During psychotherapy, the client's and therapist's re-currect patterns of interacting must be expected to provide descriptive data about the client's modes of meeting anxiety-provoking situations and reducing the tensions of anxiety

in his interpersonal encounters. In addition, as the therapist and client interact, the client's recall of interpersonal emotional experiences during his previous development which involved such significant persons as parents, siblings, peers, teachers, etc., provide a second source of data regarding more generic patterns of coping methods.

Studying the similarity between these coping patterns and their interlocking effects provides a useful means of understanding the psychotherapeutic process. Through such thematic analyses, concepts like parataxic distortion or transference can be operationally defined and subjected to empirical validation. The ebb and flow of transference reactions can be studied (Crowder, 1972), and new modes of coping can be related to previous therapist interventions (Mueller, 1969a).

In a series of studies generated by William Mueller and his colleagues and students at Michigan State University (Mueller, 1966, 1969a; Mueller & Dilling, 1968) the investigation of the psychotherapeutic process was approached via the analysis of the interpersonal behavior patterns of clients and therapists from tape-recorded interviews. It is this line of inquiry and methodology of study that has stimulated this current research effort. In order to develop the hypotheses and questions of concern to this researcher, the theoretical background of this line of inquiry and the nature of the interpersonal measurement methodology to be employed will be reviewed followed by a review of the

research utilizing the methodology which includes Mueller and related researchers.

In line with the Sullivanian interpersonal position already briefly presented as an introduction, Mueller reported (1969b) that his research interest in tracking the interpersonal dimension of the psychotherapeutic process was a function of his and his colleagues repeated observation that the pattern of client's reactions to his therapist often recapitulated the behavioral patterns that the client learned as modes of coping with stress in earlier parent-child interactions, thus serving as indices of generic conflicts. By analyzing the generic interaction patterns, these researchers found a useful means of understanding current therapist-client behavior, since, through insights gained from such analyses, the therapist is in good position to break the destructive patterns by providing what Alexander described as a "corrective emotional experience" (Alexander and French, 1946).

In related observations, Mueller (1969b) noted that the therapist plays no small part in stimulating client reactions by his own interview behavior. In fact, the therapist may unwittingly react to his client as previous important figures in the client's past have done, activating client memories of previous disconcerting interactions in the process. In this regard, Kell and Mueller (1966) proposed that the client's recall of specific earlier

emotionally laden interactions may actually mirror the emotional conditions being established by the therapist in relation to the client.

As mentioned, these observations are by no means unique to Mueller, but are replications of the observation of many other theorists and practitioners and have, for example, been carefully delineated in the literature on transference and countertransference, and particularly in the theorizing of Sullivanian-related interpersonal theorists. The point here, however, is that these kinds of observations have stimulated the direction of these studies.

Description and Use of Systems for Interpersonal Behavior Analysis

The empirical system utilized by Mueller for his studies is a product of the Kaiser Foundation research project begun in 1949 in response to the influence of Harry Sullivan's interpersonal relations theory and as a reaction to the considerable vagueness and conceptual looseness which characterized reference to interpersonal concepts. Efforts of the project initiated a series of exploratory investigations with the dual goal of building a systematic theory of interpersonal motivation and an empirical methodology for measuring human interaction (Leary, 1955).

One of the primary investigators in the project was the now-estranged Timothy Leary, who, under the auspices of the Kaiser group developed a highly sophisticated, systematic

approach to interpersonal diagnosis. The multilevel system defined five levels of behavior ranging in depth from overt interpersonal expression through conscious and preconscious behavior to the deepest layer of the unexpressed. Discrepancies and conflicts between levels of personality are objectively measured in terms of variability indices which are somewhat like classic defense mechanisms (Leary, 1957).

The basic unit in Leary's (1957) diagnostic system is the interpersonal reflex or mechanism which is assessed by determining the interpersonal meaning of a particular behavior, i.e., What's this person doing to the other? What kind of behavior is he trying to establish through this behavior? The basic assumptions underlying this system are derived from Sullivan's (1947) theory which is, as mentioned, interpersonal in its approach and which also assumes that normal-abnormal behavior can best be described by a continuum rather than a dichotomy. The present derivation of the system used by Mueller and to be employed in this study is represented by a circumplex model (Freedman et. al., 1951) which consists of 16 categories arranged around two orthogonal axes: dominance-submission, and hostility-affection (also referred to as love-hate or affiliation-disaffiliation). According to LaForge and Suczek (1955), the relationship between these 16 variables is assumed to be a "decreasing function of their separation on the perimeter of the circle [p. 76]."

Although the system was set up on a priori grounds, a number of reviews of the literature (Adams, 1964; Foa, 1961; Schaefer, 1961) show that the results of different studies support the structure of this model. According to Foa (1961), "The findings suggest a circumplex structure around the two orthogonal axes of Dominance-Submission and Affection-Hostility [p. 261]."

In addition to this indirect empirical support for the model, Leary (1957) has also suggested that his four quadrants are similar to the variables which have been emphasized by other personality theorists. For example, Leary observed that his quadrants resemble the classical humors of Hippocrates: choleric (hostility-dominance), melancholic (hostility-submission), sanguine (affection-dominance), and phlegmatic (affection-submission). This fourfold classification also reappears in Freud's theory with the emphasis upon the love-hate dimension in the treatment of individual behavior and the power dimension in Freud's theory of social phenomena, e.g., the interaction of the weak versus the strong (MacKenzie, 1968). There is also a suggested correspondence between Parson's (1951) "paradigm of motivational process": aggressiveness and withdrawal on the alienative side, and compulsive acceptance and compulsive performance on the side of compulsive conformity. Erika Chance (1959) also commented upon the similarity between the circumplex model and the central aspects of several Neo-Freudians, e.g., Fromm, Horney, Jung, and Adler.

Several previous attempts have been made to apply the Leary system to the study of family interaction via the study of level 2 behavior (conscious description of self and others) as displayed by marital pairs (MacKenzie, 1968). Several papers have related self and spouse ratings on the Interpersonal Checklist (ICL), a measure devised for assessing level 2 behavior in the Leary system, to ratings of marital satisfaction (Luckey, 1960a, 1960b, 1961). Mitchell (1963) used the ICL to study alcoholic husbands and their wives. Although data from these studies have been easy to obtain and score, they have provided only indirect measures of interpersonal behavior.

In a descriptive study, Guerney and Guerney (1961) applied Leary's concepts to analysis of a case of a nine-year-old girl who had a fear of death and refused to attend school. The authors concluded that the model provided a useful mode of conceptualization for family dynamics. Erika Chance (1959) applied verbs representing the Leary categories to father, mother, and child descriptions of their interpersonal experience. This investigation was undertaken to study therapeutic change and these measures were made at various points in therapy. Raush, Dittman, and Taylor (1959) also used Leary's system to study changes in the interpersonal behavior of aggressive boys in the course of residential treatment. Boys were rated early and late as to their behavior with others in the treatment setting. In a

later study, Raush et al. (1960) included a normal control group and concluded that the observed changes in the boys seemed to be due to the treatment regimen rather than to maturational factors. Dittman (1959) demonstrated that judgments using the circumplex could be made reliably, but recommended that a large number of acts be coded in order to counteract the effect of low item reliability.

More recently, Terrill and Terrill (1965) modified Leary's system by adding four neutral categories (neutral exchange speeches, unclear meaning speeches, neutral or ambiguous tone speeches) to the existing interpersonal categories. This method was used to rate the interpersonal aspects of communication within the family. Raters obtained average agreement of 78% on coding subjects' speeches. Although Terrill and Terrill found the system useful, they commented that no attempt had been made to validate the scheme. In response, Tinker (1967) compared rankings of family interaction by the Terrill and Terrill Scheme with judges' rankings of families form most to least pathological. He found significant correlation between overall judges' rankings based on charted ratings derived from 4 minutes of family interaction with family pahtology score based on a 90-minute interaction.

MacKenzie (1968) used the system to study differences between normal and clinic family members in terms of sent and received behaviors on the circumplex. She hypothesized

greater rigidity of responses for clinic families versus normals, but found little support for these hypotheses.

The most recent and perhaps the most sophisticated efforts with the Leary system have been its use to study the psychotherapeutic interaction. In a recent paper, Mueller and Dilling (1969) pointed out several concepts central to understanding the usefulness of the scheme for studying the therapy process. First, a key concept in the interpersonal method of analysis consists of examining the interpersonal behaviors of the two parties in interaction as attempts on the part of each person to establish an emotional state in the interaction which tends to elicit a predictable response from the other person. According to Freedman et al. (1951), the task of the observer or rater of the behavior in such dyadic interactions is to "emphathize with the individual whose behavior is being rated" from the position of the "objects of the activity [p. 149]." Since the target of the first interaction becomes the sender of the next interaction, the system is an overlapping dyadic one.

A second concept of the method is to couch the behavior of a person in the same basic categories or variables regardless of the conscious or less conscious character of the behavior. The same interpersonal variables are used to describe the private, less conscious, or fantasy levels of the person's emotional life as those used to describe more conscious and public levels. In this way, comparisons can be made across levels or within levels for the person.

Thirdly, and most important for the purposes of the present study, is the assumption that the behaviors of the persons in interaction can be ordered in a systematic way so that the major human interpersonal behaviors can be plotted in relation to each other.

Of primary interest to the purposes of this study is the investigation of the reciprocal impact of behavior within a specific dyadic relationship, that is, between the therapist and the client and the client and significant others as reported in therapy. The most impressive body of empirical research about the network of interpersonal effects stimulated by the behavior of subjects has been generated by the Kaiser research group in the early 1950s. Freedman et al. (1951), LaForge et al. (1954), LaForge and Suczek (1955), Leary (1957) and others have integrated the research efforts of the group and they report a convincing body of evidence in support of several hypotheses about the interrelationships of interpersonal behaviors of subjects in interaction.

Leary maintained (1957) that the most important single aspect of personality is the "reflex manner in which human beings react to each other and train others to respond to them in select ways [p. 447]." In this regard, he posits a principle of reciprocal relations, a general probability greater than chance to initiate or invite reciprocal "interpersonal responses from the other person in the interaction that leads to a repetition of the original reflex [p. 447]."

In general, dominant behavior is said to pull submissive behavior (and vice versa) and friendly behavior and hostile behavior tend to pull responses of the same kind. In support of this principle, Raush et al. (1959) observed that in groups of aggressive and normal boys aggressive behavior generally begot aggression from others and friendly behavior seemed to elicit friendly responses. However, there was a discrepancy between the number of hostile responses sent and received by aggressive boys in their interaction with adults; these adults generally sent more friendly responses to the boys than they received.

Leary (1957) has emphasized the "surprising ease and facility with which human beings can get others to respond to them in uniform and repetitive ways [p. 447]." Framo (1965) also observed that individuals "train others into relating to them in ways that enable them to continue their internal relationships [p. 144]." This has been expressed in a slightly different manner by Henry (1951) who stated, ". . . individuals learn relatively rigid patterns of interaction which they tend to project upon the world in such a way as to expect reciprocal patterns from others [p. 800]." In this regard, Henry, an anthropologist, observed that in his visit to primitive cultures "the natives seek in interaction with the anthropologist those responses to which they have been habituated [p. 800]." This idea is similar to Kell and Mueller's (1966) "eliciting theory" which describes the interpersonal maneuvers a client may use to get

the therapist to respond to him in the same way as have significant persons in the past. Furthermore, these authors view client change as being a function of the therapist responding in ways that are different from the behavior the client has experienced in these past relationships.

Consistent with these observations, Leary (1957) has suggested that disturbed persons manifest a narrow range of interpersonal behavior. "Even though all individuals consistently prefer certain interpersonal reflexes, maladaptive individuals restrict themselve to a most narrow sector of the interpersonal spectrum [p. 447]." In attempting to explain this phenomenon, Leary suggested that repeating the same behavior is a way of avoiding anxiety and that repetition tends to minimize conflict and provides the security of continuity and sameness. However, the price paid for this security is a restricted social environment where there is little opportunity for growth or change. Leary also observed that, although a sick person has few reflexes, these are most powerful in their effect so that in a relationship between a "sick" and a "healthy" person, the sick person often determines the relationship. Leary concluded that each person is presented with the problem of working out an arrangement between the "double threats of rigidity and chaotic flexibility [p. 448]."

Freud also observed (1920) that certain individuals repeated the same experiences over and over again in their

lifetime. He referred to this phenomenon as a "repetition compulsion" and attributed it to the repression of early material (often oedipal in nature) which was then repeated in contemporary experience. In describing this repetition compulsion, Freud stated: "Thus we have come across people all of whose human relationships have the same outcome: such as the benefactor who is abandoned in anger after a time by each of his 'proteges,' however much they may otherwise differ from one another, and who thus seems doomed to taste all the bitterness of ingratitude; or the man whose friendships all end in betrayal by his friends; or the man who time after time in the course of his life raises someone else into a position of great private or public authority and then after a certain interval, himself upsets that authority and replaces him by a new one; or, again, the lover each of whose love affairs with a woman passes through the same phases and reaches the same conclusions [pp. 44-45]."

In many ways, Freud's repetition compulsion is similar to Berne's scripts, which are "repetitive sets of social maneuvers based upon an unconscious life plan." In this regard, Berne (1961) observed that persons may constantly play the same role with others such as the Parent, the Child, or the Adult to the exclusion of other possibilities. In contrast to Freud, Berne's position is that the script may take a lifetime to be completed and thus the same specific events may not recur. In addition, Berne noted that

"Neurotic, psychotic and psychopathic scripts are almost always tragic and follow the Aristotelian principles of dramaturgy with remarkable fidelity [p. 117]." Like Leary (1957), Berne also observed that individuals go about getting others to play the right counter roles. However, rather than viewing "scripts" as originating as a way of avoiding anxiety, or as a derivative of the oedipal conflict, Berne believed that the motivation for the patient's behavior is his ". . . need to recapture or augment the gains of the original experience. He may seek to bring about a repetition of the original catastrophe . . . or he may try to attain a happy ending [p. 117]."

This is similar to Framo's (1965) description of what motivates individuals to maintain past familial relationships in present relationships. According to Framo, "they try to reduplicate the original family situation in their attempts at mastery, settling of old scores or pains or getting the love unalloyed form without the disturbing elements [p. 145]." Similarly, Kell and Mueller (1966) observed that clients often continue to maintain inappropriate behavior based upon the irrational premise that the client could only change himself after the significant persons in his environment have been changed by him or someone else.

In summary, it has been found that classes of behavior do elicit predictable responses from others. Further, the structure of the stimulus behaviors has been associated with

differences in the nature of the emotional problem experienced by the subject. Moreover, the breadth of the repertoire of behavioral modes of coping have been found to be an index of mental health. The validity of these propositions that interpersonal response patterns are lawful and differentiating has been empirically demonstrated by several researcher with particular regard to family interaction patterns (MacKenzie, 1968; Raush, Dittman, and Taylor, 1959; Raush, Dittman, and Llewellyn, 1960; Terrill and Terrill, 1965).

Following this line of investigation based on the proposition that the client's behaviors will elicit predictable responses from the therapist-participant of the interaction dyad, Mueller (1969b) suggested the following hypotheses with reference to the Leary interpersonal circumplex model:

1) Hostile-competitive behavior by the client will elicit counter hostility, competition, and passive resistance from therapists.

2) Help-seeking, cooperative client behavior will elicit nurturant teaching behavior from therapists.

3) Hostile-competitive client behavior will be negatively related to help-giving therapist behavior.

By utilizing a quadrant analysis of judged interpersonal reflexes, these hypotheses were operationalized in the following way: Behaviors judged in categories BCDE (B = Boast, C = Reject, D = Punish, E = Hate) were defined as Hostile-Competitive; categories FGHI (F = Complain, G = Distrust, H = Condemn-self, I = Submit) as Passive-Resistant;

categories JKLM (J = Admire, K = Trust, L = Cooperate, M = Love) as Support-Seeking; and NOPA (N = Support, O = Give, P = Teach, A = Dominate) as Supportive-Interpretive. Using this method to study the reciprocal impact of behavior patterns, Mueller confirmed the directional hypotheses numbers (1) and (2) listed above but did not confirm number (3). In the study there was also an analysis of several exploratory questions regarding the reciprocal relationship of interpersonal behaviors on the quadrant level and also on the more specific octant level (octants are the combination of two related categories on the circumplex, BC, DE, FG, etc.). Mueller's exploratory analysis data serve as the source of suggested hypotheses of this study.

In addition, Mueller noted in his conclusions that while the interpersonal method showed promise of further productive analyses, further investigation of the variables explored with the method should include a more extensive analysis of a broader range of interview material over the course of therapy providing an opportunity to more firmly establish the reciprocal impact of client and therapist interpersonal behavior patterns, with the necessary replication of already confirmed quadrant hypotheses and the statement and testing of more specific octant-level interactions on the circumplex. Indeed, one important feature of the present study is the analysis of interpersonal behavior patterns over the course of therapy by examining complete

therapy interviews rather than through the analysis of time-sampled segments.

Hypotheses

The problems of interest to this researcher are derived from the two main lines of theoretical thinking and investigation already reviewed. The first of these related to the empirical investigation of what has been referred to in the literature on transference, countertransference, interpersonal parataxic distortions, etc. The approach to be taken here is to codify and operationalize the interpersonal behaviors of the client and his therapist and examine the convergence of client and/or therapist with client-reported earlier interactions with significant others. In this regard the following hypotheses are stated:

(1) During psychotherapy, the behavior of the client toward the therapist will become increasingly similar to his recalled behavior patterns toward significant others (parents, peers, siblings, etc.)

(2) During psychotherapy, the behavior of the therapist toward the client will become increasingly similar to the client's recall of the behavior of significant others towards the client.

Secondly, the study will address itself to the mapping of the relationship of the various interpersonal behaviors designated by the Leary system. In short, this researcher is concerned with the reciprocal pull of interpersonal behaviors and their change over the course of therapy, and the concomitant changes in client and therapist roles. In

this regard, the following nine hypotheses are stated as derived from the theoretical bases of the system and as suggested from the most recent research employing the method. These hypotheses are made with reference to the quadrants of the circumplex.

(1) Competitive-Hostile (BCDE) client behavior will elicit Competitive-Hostile (BCDE) therapist behavior.

(2) Competitive-Hostile (BCDE) client behavior is negatively related to Supportive-Interpretive (NOPA) therapist behavior.

(3) Competitive-Hostile (BCDE) client behavior will elicit Passive-Resistant (RGHI) therapist behavior.

(4) Passive-Resistant (FGHI) client behavior will elicit Passive-Resistant (FGHI) therapist behavior.

(5) Passive-Resistant (FGHI) client behavior is negatively related to Support-Seeking (JKLM) therapist behavior.

(6) Support-Seeking (JKLM) client behavior is negatively related to Competitive-Hostile (BCDE) therapist behavior.

(7) Support-Seeking (JKLM) client behavior is negatively related to Passive-Resistant (FGHI) therapist behavior.

(8) Support-Seeking (JKLM) client behavior will elicit Supportive-Interpretive (NOPA) therapist behavior.

(9) Supportive-Interpretive (NOPA) client behavior is negatively related to Passive-Resistant (FGHI) therapist behavior.

Finally, to further analyze the relationship of the interpersonal behavior categories, several hypotheses will be tested on the octant level. These hypotheses are listed as follows:

Client-Behaviors		Therapist-Behaviors
*BC	positively related to	BC
BC	positively related to	FG
BC	positively related to	PA
BC	negatively related to	NO
DE	positively related to	BC
DE	positively related to	FG
DE	positively related to	HI
DE	negatively related to	NO
FG	positively related to	BC
FG	positively related to	FG
FG	positively related to	PA
FG	negatively related to	NO
HI	negatively related to	LM
JK	positively related to	JK
JK	positively related to	NO
JK	negatively related to	FG
JK	negatively related to	PA
LM	positively related to	NO
LM	positively related to	LM
LM	negatively related to	BC
LM	negatively related to	JK
PA	positively related to	LM
PA	negatively related to	FG
PA	negatively related to	JK

*BC = Boast-Reject, DE = Punish-Hate, FG = Complain-Distrust, HI = Condemn self-Submit, JK = Admire-Trust, LM = Cooperate-Love, NO = Support-Give, PA = Teach-Dominate.

CHAPTER II

METHODOLOGY

Subjects and Setting

The subjects for this study were drawn from two sources. The first source of data was made up of audiotapes collected for a data pool of completed cases, at the University of Florida Counseling Center, which have been gathered in order to provide a data bank for research in psychotherapy. The remaining half of the cases were taken from a similar therapy research data bank at the Virginia Polytechnic Institute and State University. These tapes were acquired by way of special loan and data exchange between the two centers. In both cases the clients represented included both graduate and undergraduate students and their spouses who had voluntarily come to the centers for individual psychotherapy and agreed to participate in the research. The tape-recorded interviews were collected systematically from first interview to termination. In addition, as part of the process of data collection for the data banks, subjects were asked to complete various pre-, post-, and in-process therapy measures which included the Personal Orientation Inventory (POI), Therapy Session Report (TSR), Interpersonal Checklist (ICL), California Psychological Inventory (CPI), and a written self-description of their problems pre-therapy which they rated

for improvement post-therapy. Therapists also completed the POI and the TSR in the course of their contact with the client. Six cases were selected from each data bank.

The therapists were the senior staff, interns, and practicum students of the two counseling centers, to whom the participating clients were assigned according to the usual counseling center procedures for assignment.

In drawing the client-therapist pairs from the data bank, the primary consideration for selection was that the client's problems or difficulties were interpersonal in nature. Obviously, this criterion is quite broad in that it may be argued that few, if any, problems do not have interpersonal components. This statement of selection is made simply to eliminate center clients who seek vocational counseling for decision making, present more academic-related difficulties, or seek only short-term support for situational or crisis intervention. Secondly, the client-therapist pair must have completed a minimum of 4 sessions of therapy. Finally, those cases in which any of the recorded interviews necessary for analysis and transcription were inaudible were eliminated. With regard to these criteria, this study examined 12 cases with a minimum of 4 sessions and a maximum of 12 sessions. If the therapeutic contact went beyond 12 interviews before termination, only the first 12 sessions were considered in the analysis. This qualification was deemed appropriate because of the process nature of the

study and necessary because the analysis was designed to examine and test the hypotheses in whole interviews rather than sampled segments. Thus, to include in the analysis whole interviews beyond this point of 12 sessions would make the necessary time for judging and data analysis unfeasible. The actual sample included eight female clients and four male clients. Nine therapists participated, six male and three female. The 12 cases ranged in length from 4 to 17 one-hour sessions,with a mean length of 7.2 sessions.

Selection of Interviews for Analysis and Hypothesis Testing

The two main aspects of this study involved the analysis of the interpersonal behaviors expressed by the client and his therapist in the dyadic interaction of the psychotherapy interview. To test the first group of hypotheses regarding "transference" and "countertransference" behaviors it was necessary to compare early versus later interview material in order to assess whether or not the therapist and/or client are moving into ways of behaving toward each other in the interaction that increasingly, over the course of the therapy, mirror the client-reported other-interaction patterns. For this purpose, the first interviews were compared to the last interview.

The testing of the second group of hypotheses regarding the reciprocal pull of interpersonal behaviors represented on the circumplex was accomplished by an analysis of judged

interpersonal behaviors made from every other whole-interview of the client and therapist. By tabulating and correlating the scored interpersonal mechanisms both "sent" and "received" by both client and therapist over this more extensive interview material, the hypotheses of reciprocal interaction of the behaviors was tested. With the ceiling of 12 sessions placed on each case and selecting the first and last session and every other session for analysis, the total rated sample includes 49 whole-interview sessions.

The more detailed explanation of statistical procedures employed will be further specified in a later section.

Method of Tape Analysis

As described in Chapter I, the method for tape analysis used in this study consisted of applying the interpersonal system of behavioral diagnosis developed by Freedman et al. (1951), later elaborated by LaForge et al. (1954), LaForge and Suczek (1955), and most comprehensively by Leary (1957). As mentioned above the system has been applied to a variety of settings and interactions.

According to the method, behaviors are described as interpersonally oriented responses which can be plotted around a circumplex and defined in terms of two major axes: a dominant-submissive axis and an affiliative-disaffiliative axis (LaForge & Suczek, 1955). The basic proposition was

that all responses can be plotted in terms of these two major axes and that these axes are sufficient to explain most interpersonal behavior.

A circumplex consisting of 16 interpersonally oriented behavior categories, called mechanisms or reflexes, is used to describe the relationship of motives to each other. The concept of the reflex is that the subject's behavior in interaction consists of an unreflective tendency to respond to the stimulation of the other party (Leary, 1957). In Figure 1 the circumplex is presented along with the illustrative verbs and letter designations as they were described by Freedman (1951): A = Dominate, B = Boast, C = Reject, D = Punish, E = Hate, F = Complain, G = Distrust, H = Condemn Self, I = Submit, J = Admire, K = Trust, L = Cooperate, M = Love, N = Support, O = Give, P = Teach. In addition, further descriptions have been added to the categories as derived from later research applications with the circumplex system (MacKenzie, 1968; LaForge et al., 1954; Leary, 1955) and condensed by the author. This array was used as a guide for categorization by the judges in rating the taped sessions and is shown in Figure 1.

Instructing and Training Judges

As noted earlier, a key concept in the interpersonal method of analysis consists of examining the interpersonal behaviors of the two parties in interaction as attempts on

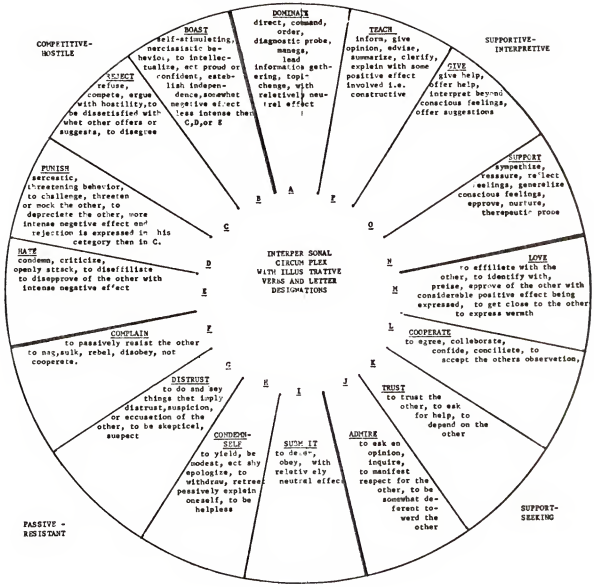

Fig. 1. Interpersonal circumplex model with letter designations and illustrative verbs characterizing the 16 interpersonal categories. (Adapted from Freedman et al., 1951).

the part of each person to extablish an emotional state in the interaction which tends to elicit a predictable response from the other person. The task of the judge in rating the behaviors is to "empathize with the individual whose behavior is being rated" from "the position of the object or objects of the activity" (Freedman et al., 1951).

Six judges were used for the ratings. They were four graduate students in clinical or counseling psychology and two undergraduate students in Honors Psychology. In preliminary training sessions, the judges were oriented to the circumplex system, difficult mechanisms were clarified for them, and the method of recording ratings and judging multiple behaviors was described and exemplified. Combining the procedures developed earlier and described in detail elsewhere (Mueller, 1969b; Mueller & Dilling, 1969; Crowder, 1972; MacKenzie, 1968), judges were provided with a manual of instructions and explanations describing scoring categories and giving illustrative examples. Training was carried out in a group and approximately 30 hours of training time was required in order to reach suitable levels of agreement for the actual judging to begin.

Briefly, the factor structure described by LaForge and Suczek (1955) was used as a general guide to orient judges to interpersonal mechanisms of the therapeutic interaction. In rating behaviors, judges were instructed to decide first whether a given unit of behavior has a dominant or submissive

quality to it and then to study the affiliative or disaffiliative quality of the unit. These decisions allow placing the unit in appropriate quadrants and then a more specific decision may be reached regarding the approriate octant or individual reflex of the system.

The scoring unit is defined as an uninterrupted speech of the client or therapist. Comments which simply facilitate the client's continuing but do not affect the feeling state were not considered interruptions. Any comments by the client were always scored according to their intent. Within any given unit, the dominant feeling being expressed was scored according to the emotional state the speaker was attempting to establish. Shifts in feeling in a unit were scored as mechanisms and ordered as they occurred in the unit. If two feelings were bound together and of equal strength, both were scored and punctuated with a slash (e.g., B/K). For purposes of quantifying and ordering the data in order to test the study hypotheses the first judge to score the material was designated as criterion judge whose ratings were used to test the study hypotheses. This judge's order and number of scored mechanisms was used as a guide and noted on the transcript for the second judge so that both judges would score an equal number of units. Obviously, this did not allow any test of the reliability of judgment regarding unit length, amount of context considered in judgments, etc., but this qualification was necessary in

order to compare the ratings in any meaningful way. The feeling states as scored by the criterion judge were then treated in exactly the same way as if they were sequential feeling states. It was recognized that this procedure results in loss of some information, but any compromise between the competing affects scored would result in greater distortion of the data.

In the scoring process, all client-therapist interaction units were scored as one set of data, while all client-reported other-interactions, whether real or fantasied, were scored as a second set of data. For these client-other responses, the judge identified the "direction" of the client-reported interaction, that is, whether the interaction involved a client interpersonal behavior toward a significant other (e.g., "I hate my mother" scored E) versus an interpersonal behavior of a significant other toward the client (e.g., "My mother takes care of me" scored N and circled on the score sheet).

For the scoring, the potential "actors" and "targets" (Bales, 1950) of client-other interactions may include client, father, mother, brother, sister, peers, or others. Three types of client-other interpersonal behaviors were noted and scored. These include:

(1) Client's report of actual interaction with others (e.g., "My parents told me to quit school and join the army.").

(2) Client's fantasized interaction with others (e.g., "I'm afraid people will reject me.").

(3) Client's feelings about others as reflected in his statements about them (e.g., "They are stupid people.").

As stated earlier, shifts in feeling within a scoring unit were ordered sequentially as they occurred. Thus, if within a given unit the client shifted from anger (C) to self-condemnation (H), then made a request for help (K), the scoring would reflect these shifts (C,H,K). The advantage here is that it provides the means to delineate the client's immediate reflex action (C) to therapist's stimulation, and the client's stimulus (K) for the next therapist-produced reflex. Thus, the scoring method allows a chaining of data together so that analysis can proceed from either the therapist or client point of view.

In the following series of scorings the process can be illustrated:

```
   Client:  K,E
Therapist:  L,P,N
   Client:  C,H,L
Therapist:  N,P
   Client:  D,H,K
```

In this sequence, the client's E (Hate) elicits therapist's L (cooperate) and client L elicits therapist N, etc. Likewise, therapist N elicits client C, P elicits client D, etc. This type of analysis is an important part of the approach, contributing to the testing of hypotheses of the study which will be elaborated in the section discussing the preparation of data for the testing of hypotheses.

It should also be noted that in the actual judging process, the judges were provided with typescripts to follow

along with the audiotape recording of the interviews. This was necessary so that the criterion judge could indicate to the second reliability judge the units scored and the separate mechanisms within a given unit. This information was essential for comparisons to determine inter-judge reliability.

Reliability

Studies of continuous data, such as the circumplex used here and previously, have reported reliability in a variety of ways (Mueller and Dilling, 1969). Data have been reported simply as percentage of agreement scores between judges across items (Terrill and Terrill, 1965), coefficients of item agreement have been applied to the data (Dittman, 1958), and rank order correlation coefficients have been reported (Mueller and Dilling, 1968) which were based on agreement between judges over a number of interviews regarding the proportion of various reflexes occurring within any given number of units.

In studies reporting percentage agreement between judges data can be reported on individual reflex level or data for individual reflexes can be combined into octants or quadrnats. Combining data in this way has the advantage of increasing inter-judge reliability by reducing the sensitivity of judgment required. In addition, rather than combine data in this way, reliability can be increased by accepting wider

fiducial limits for what constitutes an agreement score. In this way, ratings are condidered in agreement when the second judge's score occurs within a predetermined number of behavioral categories on either side of the first judge's rating. In this way, the first judge's score becomes the midpoint of predetermined fiducial limits.

Thirdly, reliability coefficients can be determined by correlating proportions of reflexes observed by judges in interviews without regard for specific item agreement. Obviously, this statistic does not take into consideration the question of whether the corresponding percentages are a function of item agreement. Proportion of agreement statistics would not allow testing of specific reflex elicitation but rather yield information about overall response patterns (Mueller and Dilling, 1969).

According to Mueller and Dilling (1969), in order to test directional hypotheses regarding specific quadrant, octant or single-reflex relationships, the most useful method is to determine item-by-item agreement between judges obtained from studying each recorded reflex. In studying item agreement, there is substantial evidence from the literature that a high percentage of agreement, generally around 70% level for large samples of behaviors rated, can be reached at a reflex of one-step level of agreement. Dittman (1958) employed an item statistic that carried with it a t test of the significance level. Using this t test

simply to indicate that a non-zero correlation exists is meaningless when 16 categories are employed. While Mueller (1969b) and several related studies (Crowder, 1972; Mueller and Dilling, 1968) have employed this method, it was decided in this study to simply report percentage of inter-judge agreement score based on item-by-item analysis of rated responses. The percentage of agreement will be reported for each agreement level as the fiducial limits are widened to eventually include the entire circumplex, allowing the reader to easily assess the source of inconclusive findings.

In order to assess reliability, the first and last sessions were rated twice by two judges working independently. These 12 first sessions and 12 last sessions make a total of 24 sessions rated for reliability and represent approximately 50% of the total sample.

Preparation of Data to Test Hypotheses

Testing the hypotheses of this study involved an analysis of the pattern similarity of behaviors in different dyads and under differing therapeutic conditions. The dyads differentiated here consist of the client in interaction with his therapist and with significant others.

Transference and Countertransference

To test the first two hypotheses of this study, it was necessary to determine whether the pattern of interpersonal behaviors of the two dyads converge over time. The method

of data preparation was derived from Mueller's (1969b) monograph and is described in greater detail there.

The proportion of responses that the client sent to the therapist in each of the eight octant categories during the first two interviews were deviated scale by scale from the proportion of responses that the client "sent" to significant others. As indicated, sequences of reflexes or multiple affects will likely occur in client and therapist units. In these cases, the last reflex emitted by the client was used to determine the behavior sent to the therapist or significant other.

Following Cronbach and Gleser's (1953) procedures for assessing profile similarity, each scale-by-scale deviation between the eight octant categories in each dyad was squared and summed across all variables and the square root of the summed squared differences was derived ($D_{C \rightarrow T_1 - C \rightarrow SO}$; where C = client, T_1 = therapist first two interviews, and SO = significant other). A similar D score may then be developed for the later interview client-to-therapist behaviors ($D_{C \rightarrow T_2 - C \rightarrow SO}$). Thus the hypotheses can be operationally stated:

$$H_1 : (D_{C \rightarrow T_1 - C \rightarrow SO}) < (D_{C \rightarrow T_2 - C \rightarrow SO}).$$

In similar fashion,

$$H_2 : (D_{T \rightarrow C_1 - T \rightarrow SO}) < (D_{T \rightarrow C_2 - T \rightarrow SO}).$$

The test of the hypotheses consisted of deviating the two D scores and signing them according to whether the

discrepancy between behavior patterns increased or decreased. The differences were then ranked without regard for signs and the signs of the less frequent ranks were summed. This procedure is the Wilcoxon matched-pairs signed-ranks (Siegel, 1956) which provides a particularly powerful test for the data since it compensates for magnitude of discrepancy as well as direction of change (Mueller, 1969).

Reciprocal Relationships of the Interpersonal Behaviors

To investigate the directional hypotheses regarding the relationships of specific interpersonal mechanisms at the quadrant and octant levels, quadrants are defined as follows: BCDE on the circumplex is called Competitive-Hostile; FGHI--Passive-Resistant; JKLM--Support Seeking; and NOPA--Supportive-Interpretive. Likewise, octants are the combination of two adjacent categories: BC = Boast-Reject; DE = Punish-Hate; FG = Complain-Distrust; HI = Condem Self-Submit; JK = Admire-Trust; LM = Cooperate-Love; NO = Support-Give; and PA = Teach-Dominate. This method of combining specific reflexes has been the usual research procedure in studies employing the circumplex analysis scheme and has proven to be a useful way to study interaction effects.

To test the first set of hypotheses about the dyadic interaction, the judgment data were combined into quadrants for a rougher estimate of overall response style relationships.

Then, for further analysis the behaviors were separated by octant judgments in order to test the hypotheses on the octant level that were suggested in the work of Mueller and his colleagues (1969b).

The method for statistical analysis here consisted of determining the proportion of responses sent by the participants in the interaction for each quadrant and octant of the circumplex. These proportions were then rank-order correlated, using Spearman rank-order correlation coefficients as the regression index. As before, when multiple affects occurred in client and therapist units, the last scored reflex was compared to the first reflex of the next and so on.

CHAPTER III

RESULTS

Reliability

As noted in Chapter II, the first and last sessions of each therapeutic dyad were selected to be judged by two judges independently for measurement of inter-judge reliability. The six judges rating the interpersonal behaviors were initially designated by number and then sorted into pairs for the assignment of the interview sessions that they would score as either criterion or reliability judge. The pairs were assigned as indicated in Table 1.

TABLE 1

Judge Assignment for First and Last Session Reliability Judging

Dyad number	Criterion judge number	Reliability judge number
1	1	2
2	3	4
3	5	6
4	1	4
5	3	6
6	5	2
7	2	1
8	4	3
9	6	5
10	2	3
11	4	5
12	6	1

The judging assignments were arranged in this way to insure that each judge served twice as a criterion judge, that is, rating first and last sessions for two separate dyads with validation four times, twice for one dyad by one judge, and twice by a separate judge for the second dyad to which he was assigned. For example, as shown in Table 1, Judge 1 served as criterion judge for Dyad 1, rating first and last sessions of this dyad and being validated for both sessions by Judge 2. In addition, Judge 1 served as criterion judge for Dyad 4, being validated in both first and last sessions by Judge 4. This interlocking arrangement was selected so that all six judges could validate for reliability in the criterion position overlapping with all remaining pairs. With their reliabilities established, then each judge could be considered expert for criterion judgment of the intermediate sessions involved in the analysis. In this way, the rating time was shortened and the pooling of rated responses could be accomplished for the testing of study hypotheses.

In Table 2, the results of computing inter-judge percentage agreement scores are reported for each judge pair with each dyad rated. The left column of the table labeled Agreement Discrepancy refers to the inter-judge discrepancy of judgments ranging from perfect agreement (0-D) through complete bipolarity of judgment (8-D) on the circumplex. The number of reflexes which were rated for each level are then reported along with the total. This is

TABLE 2

Reliability: Percentage of Agreement Scores for Judge Pairs by Dyads

Judges 1 & 2--Dyad 1

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	213	.635	.635
1-D	24	.073	.708
2-D	24	.071	.779
3-D	35	.105	.884
4-D	14	.041	.925
5-D	3	.009	.934
6-D	17	.051	.985
7-D	3	.009	.994
8-D	2	.006	1.000
Total	335		

Judges 3 & 4--Dyad 2

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	248	.598	.598
1-D	39	.094	.692
2-D	31	.074	.766
3-D	30	.072	.838
4-D	11	.027	.865
5-D	8	.019	.884
6-D	19	.046	.930
7-D	21	.051	.981
8-D	8	.019	1.000
Total	415		

Judges 5 & 6--Dyad 3

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	237	.602	.602
1-D	56	.142	.744
2-D	24	.061	.805
3-D	30	.976	.881
4-D	8	.020	.901
5-D	8	.020	.921
6-D	15	.038	.959
7-D	6	.016	.975
8-D	10	.025	1.000
Total	394		

Judges 1 & 4--Dyad 4

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	190	.523	.523
1-D	44	.122	.645
2-D	44	.122	.767
3-D	42	.116	.883
4-D	11	.030	.913
5-D	9	.025	.938
6-D	9	.025	.963
7-D	7	.019	.982
8-D	7	.019	1.001
Total	363		

TABLE 2--(continued)

Judges 3 & 6--Dyad 5

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	335	.648	.648
1-D	76	.147	.795
2-D	40	.077	.872
3-D	26	.050	.922
4-D	17	.033	.955
5-D	7	.013	.968
6-D	10	.019	.987
7-D	2	.004	.991
8-D	4	.008	.999
Total	517		

Judges 5 & 2--Dyad 6

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	287	.721	.721
1-D	28	.070	.791
2-D	26	.065	.856
3-D	24	.060	.916
4-D	10	.025	.941
5-D	2	.005	.946
6-D	7	.017	.963
7-D	8	.020	.983
8-D	6	.015	.998
Total	398		

Judges 2 & 1--Dyad 7

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	282	.449	.449
1-D	61	.097	.546
2-D	80	.127	.673
3-D	122	.194	.867
4-D	21	.033	.900
5-D	12	.019	.919
6-D	22	.035	.954
7-D	7	.011	.965
8-D	21	.033	.998
Total	628		

Judges 4 & 3--Dyad 8

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	248	.453	.453
1-D	91	.167	.620
2-D	101	.184	.804
3-D	31	.057	.861
4-D	15	.027	.888
5-D	22	.041	.929
6-D	16	.029	.958
7-D	12	.022	.980
8-D	11	.020	1.000
Total	547		

TABLE 2--(continued)

Judges 6 & 5--Dyad 9

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	315	.686	.686
1-D	49	.107	.793
2-D	27	.059	.852
3-D	22	.048	.900
4-D	16	.035	.935
5-D	8	.017	.952
6-D	13	.028	.980
7-D	6	.013	.993
8-D	3	.007	1.000
Total	459		

Judges 2 & 3--Dyad 10

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	231	.464	.464
1-D	70	.140	.604
2-D	57	.115	.719
3-D	84	.169	.888
4-D	17	.044	.922
5-D	11	.022	.944
6-D	16	.032	.976
7-D	8	.016	.992
8-D	4	.008	1.000
Total	498		

Judges 4 & 5--Dyad 11

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	265	.664	.664
1-D	30	.027	.691
2-D	35	.036	.827
3-D	21	.053	.880
4-D	16	.040	.920
5-D	14	.035	.955
6-D	9	.022	.977
7-D	5	.013	.990
8-D	4	.101	1.000
Total	399		

Judges 6 & 1--Dyad 12

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	195	.460	.460
1-D	58	.137	.597
2-D	44	.103	.700
3-D	54	.128	.828
4-D	25	.059	.887
5-D	15	.035	.922
6-D	14	.033	.955
7-D	12	.028	.983
8-D	7	.017	1.000
Total	424		

followed by the percentage of agreement on that level and the cumulative inter-judge percentage agreement scores. It should be noted that each pair for every dyad has demonstrated percentage agreement of at least 55% at the 1-D level (octant) with 11 of the 12 Dyads reaching the 60% level or above for 1-D agreement. At the 3-D level of agreement (quadrant) all judge pairs achieved 80% or better.

In Table 3, these data are combined for all judge pairs with the same format. As indicated, a total of 5,367 interpersonal reflexes were scored for reliability purposes. With an overall total of 11,429 reflexes scored in all sessions, this reliability sample of responses represents approximately 47% of the total sample.

TABLE 3

Reliability: Overall Percentage of Agreement Scores for All Judges

Agreement discrepancy	Units of agreement	Percent agreement	Cumulative percent
0-D	3046	.567	.567
1-D	626	.117	.684
2-D	533	.099	.783
3-D	321	.060	.843
4-D	380	.071	.914
5-D	120	.022	.936
6-D	167	.031	.967
7-D	97	.019	.986
8-D	77	.014	1.000
Total	5367		

Of the reliability sample of rated responses, the judges rated with perfect agreement in 57% of the sample

a 68% score when the limits for agreement were widened so that agreement was defined as the reliability judge scoring within one category of the criterion judge's rating. The remaining cumulative agreement percentages may be understood in like manner so that the 8-D score represents complete bipolarity of rating on the circumplex. While no test of the significance of this level of agreement level is available beyond testing significance from zero, the high levels achieved for octant level judgments (2-D; 68%) and quadrant level judgments (3-D; 84%) were comparable to the levels reported in other research employing the method. As such, the agreement levels were judged sufficiently high to warrant further analysis and testing of the study hypotheses.

"Transference" and "Countertransference"

The results of the analysis of the data to test the two hypotheses regarding "transference" and "countertransference" are reported in Table 4.

TABLE 4

Results of Wilcoxon Tests of Hypotheses Regarding Transference and Countertransference in Initial Versus Later Sessions

	Wilcoxon values			
	T	N	z	p
Client-to-therapist behaviors vs. client-to-significant others behaviors	31	12	-.628	.25 ns
Therapist-to-client behaviors vs. significant others-to-client behaviors	33	12	-.471	.31 ns

As indicated, neither of the study hypotheses was supported. Thus, the behaviors communicated and received by the client from an initial to a later interview in the dyadic relationship did not tend to converge with behavior patterns reported by the client that were communicated in the dyadic relationships with significant others.

Reciprocal Relationships of Interpersonal Behaviors

Client-to-Therapist Reciprocal Interaction: Eight Quadrant-Level Hypotheses

The results of testing the nine directional hypotheses regarding client-to- therapist response patterns on the quadrant level are presented in Table 5.

TABLE 5

Client and Therapist Interpersonal Behavior Patterns for 12 Dyads on the Quadrant Level

Client to therapist	Therapist to client			
	BCDE	FGHI	JKLM	NOPA
Competitive-Hostile (BCDE)	.10	.16	.12	.03
Passive-Resistant (FGHI)	-.14	.14	-.77**	.21
Support-Seeking (JKLM)	.06	-.24	.65*	-.14
Supportive-Interpretive (NOPA)	-.50	-.38	-.64*	.75**

Cell entries are Spearmen rank-order correlation coefficients.

*p = .05 (one-tailed test).

**p = .01 (one-tailed test).

This analysis was accomplished by carrying out Spearman rank-order correlations by means of ranking the client behaviors sent by each client in a therapy dyad and comparing this to the corresponding ranked proportions of therapist

responses to the designated category. The data in Table 5 indicate that only one of the predicted directional hypotheses was confirmed, that is, that Passive-Resistant client behavior is negatively related to therapist Support-Seeking behavior (r_s = -.77; p = .01). In other words, client passive-complaining, self-effacing, and submissive behaviors are associated with low levels of therapist trusting, affiliation, cooperation, and admiring behaviors. For the remaining hypotheses, five correlations evidenced the direction predicted, but did not achieve significance. These included:

(1) Competitive-Hostile (BCDE) client behavior is positively related to therapist Competitive-Hostile behavior (r_s = .10).

(2) Competitive-Hostile (BCDE) client behavior is positively related to Passive-Resistant (FGHI) therapist behavior (r_s = .16).

(3) Passive-Resistent (FGHI) client behavior is positively related to therapist Passive-Resistant behavior (r_s = .14).

(4) Support-Seeking (JKLM) client behavior is negatively related to Passive-Resistant (FGHI) therapist behavior (r_s = -.24).

(5) Supportive-Interpretive (NOPA) client behavior is negatively related to Passive-Resistant therapist behavior (r_s = -.38).

Two hypotheses showed no tendency to be confirmed as predicted:

(1) Competitive-Hostile (BCDE) client behavior is negatively related to Supportive-Interpretive therapist behavior (r_s = .03).

(2) Support-Seeking (JKLM) client behavior is negatively related to therapist Competitive-Hostile (BCDE) behavior (r_s = .06).

Finally, the hypothesis that Support-Seeking (JKLM) client behavior will tend to elicit Supportive-Interpretive (NOPA) therapist behavior evidenced a low negative correlation ($r_s = -.14$).

In addition, three interactional relationships achieved significance which had not been predicted:

(1) Support-Seeking (JKLM) client behavior was positively related to Support-Seeking therapist behaviors (JKLM) ($r_s = .65$; $p = .05$).

(2) Supportive-Interpretive (NOPA) client behavior was negatively related to Support-Seeking (JKLM) therapist behavior ($r_s = -.64$; $p = .05$).

(3) Supportive-Interpretive client behavior (NOPA) was positively related to Supportive-Interpretive therapist behavior.

Client-to-Therapist Reciprocal Interaction: Octant-Level Hypotheses

To further examine the relationship of the interpersonal behavior categories, the analysis was extended to the more specific octant level. A total of 24 directional hypotheses were tested. The results of the rank-order correlations of octant-level interactions is reported in Table 6. All possible combinations of octant-category correlation were carried out.

As indicated, client Boast-Reject behavior (BC) was not significantly related to any therapist octant behavior category. On the contrary, client Boast-Reject (BC) behavior tended to be negatively correlated with therapist Boast-Reject behavior ($r_s = -.24$) and Teach-Dominate (PA) behavior ($r_s = -.49$), while being positively related to

TABLE 6

Client and Therapist Interpersonal Behavior Patterns
for 12 Dyads on the Octant Level

Client to therapist	Therapist to client							
	BC	DE	FG	HI	JK	LM	NO	PA
Boast-Reject	-.24	.34	.10	-.23	.04	-.17	.44	-.49
Punish-Hate	.54*	.54*	.82**	-.54*	.82**	-.54*	.16	.36
Complain-Distrust	.18	.59*	.89**	.03	.06	-.36	.17	.08
Condemn Self-Submit	.09	-.34	.15	.48	.04	-.26	-.14	.23
Admire-Trust	.04	.79**	.06	-.26	-.27	-.13	.58*	-.85**
Cooperate-Love	.24	-.11	-.12	.68	.01	.68*	-.06	.03
Support-Give	.13	-.81**	-.69*	-.59*	.06	-.80**	.21	-.97**
Teach-Dominate	-.26	-.35	-.40	-.54*	-.11	-.74**	-.36	.69*

Cell entries are Spearman rank-order correlation coefficients.
*p = .05 (one-tailed test).
**p = .01 (one-tailed test).

therapist Boast-Reject (BC) behavior (r_s = .54; p = .05), and to Complain-Distrust (FG) behavior (r_s = .82), as well as to therapist Admire-Trust behavior (JK) with a correlation of .82 (p = .82). In addition, there was a positive correlation between client DE behavior and similar therapist Punish-Hate responses. Finally, in direction opposite to prediction, punishing-hating client behaviors were negatively related to therapist withdrawal (HI = Condemn Self-Submit).

The single directional hypothesis for client Condemn Self-Submit (HI) behavior gained no support for its predicted negative relationship with therapist Love-Cooperate behavior (r_s = -.36). No other significant relationships for this category were demonstrated, although low positive correlations were indicated for HI (r_s = .48), and PA (r_s = -.34).

For hypotheses concerning Trust-Admire (JK) octant behaviors, two of four predictions were supported. The admiring-trusting client tended to elicit supportive and help-giving behavior (NO) from the therapist (r_s = .58; p = .05), while demonstrating a negative association with therapist teaching-dominating (PA) behaviors (r_s = -.85; p = .01). The same admiring-trusting behaviors did not tend to be positively associated with therapist Admire-Trust behaviors (r_s = -.27) as predicted, nor did they correlate negatively with the therapist Complain-Distrust category (r_s = .06). An additional unpredicted relationship was noted between client JK behavior and therapist DE behavior with a positive correlation of .79 (p = .01).

In the Teach-Dominate behavioral octant, clients tended to elicit therapist complaining-distrusting (FG) behavior and therapist admiring-trusting behavior, but not beyond chance levels (r_s = .40 and .11). The hypothesis that client Teach-Dominate (PA) behavior would be positively related to therapist Cooperate-Love (LM) behavior achieved significance in the direction opposite that predicted (r_s = -.74; p = .01). Likewise, client PA behaviors tended to pull PA therapist behaviors (r_s = .69; p = .05), although this was not hypothesized.

In order to summarize the overall population of interpersonal responses across clients and therapists as a group combining all sessions scored, the data in Table 7 are presented.

TABLE 7

Overall Behavior Proportions for All Clients and Therapists for 49 Therapy Sessions Reported by Octant Categories

	Client to therapist		Therapist to client		Client to other		Other to client	
	Units	%	Units	%	Units	%	Units	%
BC	851	.184	239	.052	160	.249	47	.197
DE	43	.009	166	.036	68	.106	36	.151
FG	679	.147	106	.023	107	.166	15	.063
HI	983	.212	50	.011	95	.148	9	.038
JK	216	.047	33	.007	59	.092	3	.012
LM	1004	.217	168	.036	100	.155	33	.138
NO	71	.015	1596	.345	44	.068	36	.151
PA	778	.168	2266	.490	10	.015	60	.251
N =	4624		N = 4624		N = 643		N = 239	

It is important to note the discrepancy between the total number of responses indicated earlier in this chapter (N = 11,429) and the totals reported in Table 7. The previously mentioned total of 11,429 refers to all reflexes scored by the judges, whereas the totals reported in Table 7 (N = 4,624; N = 4,624) represent only those responses figured in the interaction correlations. It should be recalled that a given speech unit by the client or therapist may be made up of a sequence of responses (L,K,D, etc.) and that in these cases, only the last client-sent reflex is correlated with the first-sent therapist response immediately following. This accounts for the difference in total responses; that is, the difference is made up of those scored reflexes in a sequence not in the position of being either last-sent client or first-response therapist reflexes.

Table 7 indicates that the largest proportions of therapist behaviors fall in the Teach-Dominate (PA) category (49%) and the Support-Give (NO) category (34%) and so forth. Clients, on the other hand, responded most frequently in Cooperate-Love (LM) octant (22%), Condemn self-Submit (HI) octant (21%), and Boast-Reject (BC) octant (18%).

It is also interesting to note the differences in client-to-therapist responses versus client-to-other responses. In this comparison the client tends to express greater proportions of Competitive-Hostile (BCDE) behavior to others than to the therapist, as well as more complaining

distrusting behaviors, more Support-Seeking (JKLM), and more Support-Give behavior (NO). The exceptions here are that clients tend to communicate greater proportions of Condemn self-Submit (HI) behaviors, Cooperate-Love (LM) behaviors, and Teach-Dominate behaviors to the therapist than to significant others.

In like manner, the therapist tends to be less Competitive-Hostile (BCDE), less Support-Seeking (JKLM) and more Supportive-Interpretative (NOPA) toward the client than do significant others with whom the client reports interactions outside therapy.

Finally, to test for the overall similarity of client-therapist interaction patterns and the clients' interactions with significant others, two comparisons were made. First, client-to-therapist behavioral proportions on the octant level were compared with client-to-significant other patterns by means of rank-order correlation. This analysis indicates that overall client proportion ranking on client-to-therapist behaviors is positively related to the ranked proportions of client-to-other behaviors ($r_s = .91$; $p = .01$). Likewise, correlation of rank-ordered proportions by octants for therapist to client versus client to significant others yielded a significant positive relationship ($r_s = .94$; $p = .01$). When these data are viewed in relation to the previously tested hypotheses regarding "transference" and "countertransference," which showed no support for the

convergence of these behaviors as therapy progressed, they do suggest that the overall response population across therapists and clients closely approximates the clients' reported other interactions.

CHAPTER IV

DISCUSSION AND CONCLUSIONS

Client-Other Interactions Versus Client-Therapist Interactions

As outlined in Chapter I, the purpose of these study hypotheses was based on the premise that the client's behavior toward others and the behavior of significant others toward the client as reported by the client in his therapy would increasingly be manifested in his reciprocal interactions with the therapist. The concept and significance of the client's tendency to readily engage in a reenactment of emotionally laden conflicts and interpersonal operations with the therapist in ways similar to his other-interactions is seen as a widely accepted psychodynamic process. Indeed, this phenomenon of client transfer of conflict-laden attitudes and feelings to the therapist tends to place the therapist in a very significant position with regard to providing interventions appropriate to change (Mueller, 1969b). The results did not replicate the findings reported by Mueller (1969b) which indicated that the convergence of the behaviors did occur. It must be noted at this point, however, that this study, modeled in many ways after Mueller's original work, has some significant differences and limitations. First of all, the study

sample here was approximately one-third the size employed by Mueller (N = 12 vs. N = 36). This fact not only tends to limit the generalizability of this study but also tends to qualify the power of the correlational method employed. On the other hand, this study did examine the sample of 12 dyads in detail and extensively, and, as such, a sufficiently large number of reflexes was scored for testing the hypotheses of interest. Another important difference in the data-gathering process had to do with the judges and their reliability. The issue here is the psychological sophistication of the judges and the comparability of the judges' ratings. Systematic differences may have been "trained" in with different emphases as to what criteria served to make the necessary category discriminations. These differences may influence variation in results from study to study. Finally, a major difference existed in terms of measurement of inter-judge reliability. In this study, client-to-therapist judged units were pooled with client-to-other judged units for the reliability determination, whereas Mueller computed reliability separately for these two different sets of data. The emphasis given in the training of judges for this study was focused on scoring the mechanisms with essentially the same criterion with regard to the meaning of a given reflex in any dyadic interaction so that the judges learned the discrimination of the impact of the behaviors in virtually equivalent ways. As such, it was judged to be unnecessary to separate these judgments for separate reliability determination.

The additional analysis of overall response styles did suggest that the proportions of therapist-to-client and client-to-therapist behaviors were quite similar to the comparable interactions of other to client and client to others, respectively. If this in any way can be viewed as support of the study hypotheses or complementary to Mueller's findings, it raises the important question of whether or not therapeutic change will occur. If the therapist does not offer alternative ways of relating beyond simply paralleling in his responsivity the responses of others, then what behaviors or ingredients distinguish the therapy process?

On the other hand, the question of whether this state of therapeutic affairs is effective or not may be an inappropriate one. Hyman and Berger (1965) argued that the question, "Is psychotherapy effective?" may well be inappropriate because of the homogeneity which is often ascribed to patient and treatment, but which in fact does not exist. A more useful question would be: Which set of procedures is effective for what set of purposes when applied to what kinds of patients with which sets of problems and practiced by what sorts of therapists? Or translated into the interpersonal methodology employed here: What specific interpersonal interventions lead to or tend to elicit which other interpersonal patterns of behavior given what sort of client interpersonal disabilities in interaction with what sort of interpersonally functioning

therapists? Only when the answers to some of these questions are gradually unraveled can meaningful conclusions concerning effectiveness be established. At the point of answering these questions the issue becomes not one of efficacy of psychotherapy as an entity but the effective prescription and delivery of specific interpersonal interventions to reach specifiable goals. In this author's view, the interpersonal methodology utilized in this study and by others may be an effective tool for beginning to more specifically unravel some of these important factors and processes.

Another important issue raised by these findings and previously suggested by Kell and Mueller (1966) is to what degree, if any, the client's production of "other" directed material in therapy is a function of therapist responsivity. While degrees of correlation or association can be established, methods for examining statistically the specific elicitation of dyadic responses awaits further delineation. Rausch (1965) has suggested a type of pattern analysis for studying interaction sequences which may be developed to provide such statistical validation of specific elicitors (Mueller, 1969b).

Other approaches to the question have been suggested, however. Claxton (1972), utilizing the typescripts and circumplex scored data of this study, examined the relationship of "client displacement" in content and the therapist's

levels of Accurate Empathy. Displacement was defined as a marked change in topical content which could include shifts to client focus on other interactions. She found that these points of client displacement were preceded by therapist responses that were significantly lower in empathic understanding. One possible interpretation might be that the client, when faced with a therapist at given points in therapy who is unable to communicate his understanding or accurate attending behaviors, tends to shift to another mode of communication of important interpersonal events, specifically the recall of significant other interactions.

A final alternative explanation of this study's failure to demonstrate the convergence of in-therapy and other-reported interactions would be that the therapists studied are indeed avoiding or are at least not engaged in any increasing adoption of response patterns as a result of client transference and are providing alternative strategies of relating. This is somewhat consistent with the finding that therapists tend to be less competitive-hostile, less passive-resistant, less support-seeking, and more supportive-interpretive in their relationships with the clients than do others.

Client-Therapist Interpersonal Response Patterns

The results of the quadrant level analysis failed to replicate the confirmed hypotheses of the Mueller (1969b)

study. Competitive-Hostile behavior did not tend to be related to similar responses from the therapist, not did the therapist consistently respond to the client's bid for help and support with the expected support and help-giving behavior. In general, when the client assumed a passive-resistant mode of interpersonal communication, the therapist tended to respond with withdrawal of affiliative, cooperative, and trusting behavior. Furthermore, when the client communicated support-seeking, warmth, affiliation, and trust, the therapist, in turn, supplied the responses that brought him closer to the client--almost as though when the client rebelled, resisted, or distrusted the therapist, he "punished" the client by withholding his trust and affiliation with the client, but not to the point of producing consistent punishing responses as scored on the circumplex. Then, when the client shifted to more "good client" behavior in the therapy, he was more warmly responded to in terms of the trust and respect the therapist communicated to him.

In addition, it appeared as if when the client related to the therapist in what might be termed "good therapist" behavior of support and interpretation, the therapist in some ways supported the client's more dominant behavior, but at the same time did not offer high levels of trust and closeness. Another possibility to explain the high level of Supportive-Interpretive behavior in response to the client's increased dominance would be that the therapist

tended to become more leading and dominant in a kind of competitive reaction.

An extension of the analysis to the octant level disclosed some more specific information regarding the behavioral patterns manifested in the dyadic interactions. With this breakdown of the data, the indication is that, indeed, client hostile behavior of more intense negative affect is responded to in like manner, with the therapist being more confronting and dominant, but at the same time maintaining significant levels of trust and closeness with his client. This may be interpreted to mean that while the client's provocative hostility may meet with realistic response of retaliation, the therapist does so without withdrawing his caring and respect for the client.

On the other hand, this particular combination of therapist warmth with significant levels of hostile behavior may represent a double-binding and confusing interaction mode for the client to respond to, depending on various factors. Further research to assess intensity, clarity, and duration of this pattern of responses might offer information as to its dynamics and impact. Such a pattern is also evidenced in the positive relationship between Admire-Trust behavior and therapist hostility plus therapist support, while a significant drop in dominant teaching behaviors is indicated. Again, these data do not afford an explanation of the pattern, but future investigation might be directed toward unraveling the interplay of these patterns.

When the Support-Seeking quadrant of behaviors is further examined by octant categories, the results show a positive relationship between somewhat passive and dependent (FG) client behavior and therapist responses of a hostile nature, but again with the same behaviors often being responded to with considerable support and help-giving of a comparable dominance level. Furthermore, client cooperative and affiliative actions tend to elicit therapist responses of a similar kind. This may be interpreted to mean that these client behaviors which include self-disclosing, confiding, and expressions of warmth are responded to by the therapist becoming more confiding, accepting, and warm. This trend is somewhat modulated by the fact that the therapist often responds to such behavior in a very submissive and yielding way and with low dominance.

The support-giving behavior of the client, as well as his teaching and dominating behavior, is responded to with similar reflexes. In general, the therapist tends to reciprocate with low levels of behavior across all octants with the exception of increased dominance and interpretation. This pattern again suggests, as with the quadrant analysis, that the therapists avoid responding with either negative, confronting responses or more submissive-yielding responses to this mode of client behavior, and instead reciprocate in the role of the "teacher," authority, or leader of the therapeutic interaction.

In the overall totals of therapist and client proportional response styles, several interesting findings emerged. The clients as a group tended to be "good" clients by spending their time responding with cooperation, confiding, self-effacement, and less intense hostile behavior (BC). The therapists likewise devoted the greater majority of their responding in the role-typical supportive-interpretive mode. Again, these patterns suggest some interesting prospects for further analysis. Leary (1955) has suggested that the degree to which an individual demonstrated flexibility in his ability to engage in a wide range of interpersonal behaviors in appropriate circumstances serves as a gauge of his psychological adjustment. Conversely, while individuals do tend to prefer certain interpersonal behaviors, "maladaptive individuals restrict themselves to a most narrow spectrum of the interpersonal spectrum." This phenomenon is explained by the fact that repetition of the same behavior is a way of avoiding anxiety, minimizing conflict, and providing the security of sameness and continuity. Unfortunately, the price paid for such an interpersonal way of being is a restricted social environment with little opportunity for change. In addition, while the maladaptive individual may communicate only a few reflexes, they are most powerful in their effect so that the interpersonally restricted person may determine the relationship he is to have with others and thereby restrict their ways of relating if they remain in the relationship. The question raised

by the data seems to be: If the therapist does tend to narrowly define his role in his interaction with his client, will the client be able to redefine his relationships with others, experiment with new behaviors, or in any way experience change or growth? Indeed, as Kell and Mueller (1966) suggested, clients and therapists have reciprocal emotional impact and they both experience change as a result. In fact, therapy may not have occurred if change and growth is not shared by both participants in the dyad.

Although this study did not examine any criterion of change or outcome, it is interesting to note a comparison between the client and therapist sample here and a sample of dyads examined by Crowder (1972) in a recent study. Using change scores on the Minnesota Multiphasic Personality Inventory as the criterion of change, Crowder found that unsuccessful client groups engaged in significantly greater proportions of Passive-Resistant and Supportive-Interpretive behavior and less Competitive-Hostile behavior than did successful clients. Successful therapists were more Competitive-Hostile and less Passive-Resistant in earlier and middle portions of therapy and more Supportive-Interpretive in later interviews. The comparison of this sample generally would suggest that the clients were more similar to Crowder's unsuccessful group while the therapists approximate Crowder's successful sample. This comparison is extremely crude and no definitive explanations regarding the success of either group can be offered without extended

investigation. In addition, the Crowder study does point up a limitation of this study and another direction that the investigation might take in further analysis of the already collected data. This would be the examination and analysis of the interaction relationships as they change during the various periods of the therapy.

The implications and questions raised thus far in the discussion of this study represent only a few of the numerous possibilities for future research. For example, while the circumplex system is designed to classify behavior into 16 discrete categories, the behaviors sorted into a category most probably represent differing levels of intensity, clarity and meaning in their impact on the interaction. As such, the particulars of any one category could be further examined and analyzed. Certainly, the ways in which therapists are supportive may involve a wide range of behaviors that vary from therapist to therapist. Also, the awareness that the client or the therapist has of his impact may be an important variable. In a study now in progress, the author is comparing the outside judge ratings of client and therapist behaviors with the therapist's view and categorization of his own and the client's behavior in therapy. This deals with the question of whether or not the outside criteria employed in this interpersonal methodology can account for the therapist's behavior and whether or not he shares this view. Further extended, one might compare the levels of

therapeutic functioning of various therapists who show high versus low agreement with the rated behaviors.

Other areas of interest might be in the examination of judge differences in terms of the effects of judge expectations and attitudes about the "ideal" or "appropriate" therapist or client role behaviors and how these expectations tend to influence his ratings of dyadic interaction. The circumplex system provides a useful tool for the examination of differential response based on sex-role expectancies and their influence on the interaction in therapy. In addition, the circumplex scheme might be useful in the study of multiple therapy interactions. Further delineation of recurrent patterns or conflict patterns in behavior might prove productive for additional study. Obviously, the list of possibilities is far from exhaustive. Regardless, the study described by the author and the numerous other studies that have employed this approach and methodology indicate considerable promise for use in the continued study and definition of interpersonal interaction and intervention.

APPENDIX

SCORING MANUAL FOR THE INTERPERSONAL BEHAVIOR RATING SYSTEM

Scoring Manual for the Interpersonal Behavior Rating System (Freedman et al., 1951)

General Considerations

The interpersonal circumplex consists of 16 reflexes (categories) of interpersonal behavior, into which all interpersonal behaviors may be rated. It is divided into quadrants by orthogonal axes. The vertical axis covers the dimension of dominance-submission, while the horizontal axis represents the affiliative-disaffiliative (or love-hate) dimension.

In rating behaviors into categories, the behaviors are first judged in terms of the axes, and thus the behaviors are placed into quadrants of the circumplex. Then, a behavior is judged into a specific category within the quadrant by matching it with the descriptive terms of those categories. Statements sometimes include behaviors of more than one category, in which case multiple scorings should be used.

Problems arise because (1) the categories are not mutually exclusive, (2) the meaning of behaviors are determined partly by the context in which they occur, (3) affect and content (i.e., words) are sometimes incongruent, and (4) raters may use different levels of interpretation. These problems are demonstrated below by the use of a few examples.

Consider the client statement: "I like you." If this statement were genuine, it would be rated "M." If it were said sarcastically, it would be rated "D." If it came after an interpretation which the client did not want to deal with, it would be rated "F."

For another example, consider the following client statement: "You look tired today." If this statement connoted genuine sympathy, it would be rated "N." If it came out of the client's guilt for seeking help from the therapist, it is possible to argue that it should be rated "H," but this rating would require deeper interpretation than the sympathetic "N."

The client statement, "I don't trust you," implies distrust "G" and rejection "C." It is necessary to choose one or the other in this rating system.

In rating the client and therapist behaviors, the following priorities are listed so that the above problems will be minimized: (1) context takes precedence over affect, (2) affect takes precedence over content, and (3) interpretation does not go beyond the immediate context.

Three types of reported client-to-other behavior are scored. These are (1) client's reports of actual interaction with others, (2) client's fantasized interaction with others (includes wishes, desires, should-haves, and fears), and (3) client's feelings about others as reflected in his statements about them. The following examples illustrate these categories:

(1) C: "My parents told me that I shouldn't get serious about any girls while I'm here. I told them to stay out of my affairs."

(2) C: "I wish I had some close friends."

C: "I'm afraid that people will reject me."

C: "I should have told her off."

(3) C: "I distrust my parents."

C: "They are selfish people."

Below, examples of behavior for each category are listed, and, where deemed helpful, explanatory statements are included. It is impossible to provide examples for some of the meanings of some reflexes, because the meanings are sometimes very dependent on the tone of voice, e.g., sarcastic behavior (reflex "D").

Examples of Behavior for Each Category

Reflex "B" (Boasting, Self-Stimulating, Narcissistic, Intellectualizing Behavior)

Therapist and client "B"

1. Therapist or client is boastful. Examples:

   C: "I made the highest score on the final examination."

   T: "Looks like I really helped you."

2. Wandering, free-associating, conversation in which the speaker provides his own stimulation. This category usually applies more to the client than to the therapist. Examples

would include client statements in which a "list" of activities since the previous session is covered without emotion, and without a previous therapist eliciting question. This is generally a long, rambling statement, which may have been started by a therapist question, but which continued with the client providing his own stimulation. In this case, the client's statement would be rated in two parts, the answer to the therapist's question would be rated an "L," and the rest of the client's statement a "B."

3. Therapist or client intellectualizes.

   Therapist example:

   C: "I feel really affectionate toward you."

   T: "That's because you once had that feeling toward your father."

   Client example:

   T: "What is it that's troubling you?"

   C: "I haven't worked out my Oedipus complex."

Client-to-other "B"

1. Client reports boasting to others.

   C: "I told him how wonderful I am."

2. Client reports having been narcissistic with others.

   C: "I took advantage of her."

Reflex "C" (Rejecting, Withholding, Competing, Accusing)

Therapist and client "C"

1. Client or therapist rejects previous statement (regardless of whether previous statement was true). Examples:

   C: "No, that isn't right. What bothers me is that no one seems to really care for me." In this example, the "No, that isn't right" would be rated "C." The second part would be rated "P" if no strong emotions were attached to it. Of course, if the client expressed feelings of hurt or sadness, the second part may be rated "K." A "no" statement following a therapist question with no point of view attached (i.e., where therapist does not make a positive statement that is subsequently rejected) should be rated "L" instead of "C."

2. Client and therapist are arguing, competing, usually with an undercurrent of hostility. Examples:

   T: "You can find people like that in New York."

   C: "I've looked and there are no people like that here."

T: "You haven't looked in the right places. You've met only a few people here."

C: "I know I can't find people like that here. I need to go somewhere else."

The first therapist statement in this interchange may not be rated a "C," depending on the previous client statement that elicited it. For instance, if the previous client statement had been "I need to find some people that I could trust," the first therapist statement above might be rated "P."

3. Client or therapist refused a previous suggestion, directive, etc.

T: "I will not see you twice a week."

C: "No matter what you say, I won't stay here."

Client-to-other "C"

1. Client reports rejection of others.

C: "I don't like him."

2. Client reports competing with others.

C: "I tried to beat him at his own game."

Reflex "D" (Sarcastic, Threatening, Punishing Behavior)

Therapist and client "D"

T: "If you don't get out of that relationship, I'll stop seeing you."

C: "People are going to keep bugging me until I kill myself."

Client-to-other "D"

C: "I told him that if he continued to harass me that I wouldn't see him anymore."

Reflex "E" (Hate, Attack, Disaffiliate)

Therapist and client "E"

T: "Get out of my office."

C: "Go to hell."

T: "You're an idiot."

Client-to-other "E"

C: "She's nothing but a whore."

C: "I broke up with him."

C: "I hate my mother."

Reflex "F" (Compalin, Rebel, Nag, Sulk, Passively Resist)

Therapist and client "F"

1. Client passively resists therapist's interpretation put in the form of statement or question. Examples:

   a. T: "Sounds like you get anxious around competent females."

      C: "I don't know."

   b. T: "Is it that your boyfriend reminds

you of your father in some ways?"

C: "I don't know. (pause) One thing that really disturbs me is that I can't concentrate when I study."

c. T: "Do I hear some resentment in there?"

C: "I dont know. (pause) You may be right. Yeah, I wasn't aware of it but I really do resent him for that."

Note: In example a, the client's "I don't know" is rated "F," because it indicates passive resistance to the therapist's statement. In these cases, the client is demonstrating an unwillingness to even consider the validity of the statement, but at the same time is not flatly rejecting it either. In example b, the "I don't know" is followed by the change of subject. In this case, it is rather obvious that the change of subject is a defensive maneuver, seemingly unrelated to the therapist's question. The "I don't know" should be scored "F," and the change of subject should be scored "A." In example c, the "I don't know" was intended to indicate thoughtfulness, an attempt to deal with the

therapist's question, which is validated by the rest of the client's statement. In this example, the "I don't know" is not scored, but the remainder of the statement should be enclosed in parentheses and scored "L."

2. Sometimes the therapist or client angrily withdraws (sulks), with some such comment as "I don't know." These should be scored as "F."

Client-to-other "F"

C: "I resented his saying that, but I didn't say anything."

C: "When Dad yelled at me, I went to my room and didn't come out for hours."

Reflex "G" (Distrust, Suspect, Be Skeptical)

Therapist and client "G"

1. Therapist or client expresses skepticism at the previous statement of the other party. Examples:

"What?"

"What do you mean?"

"Maybe."

The first two examples could be scored "G" when the previous statement and its meaning were perfectly clear. The "maybe" expresses incomplete acceptance, or, better, neither rejection nor acceptance, but does express skepticism.

2. Therapist or client is suspicious of feelings, motives, etc., expressed by the other party.

Examples:

C: "I don't think you really like me."

T: "Are you sure you're dealing with the thing that's really bugging you?"

Note: If the statement is an unconditional rejection or accusation (e.g., "You don't like me!"), it should be rated "C," not "G."

Client-to-other "G"

C: "I didn't believe her."

C: "Sometimes, it seems like no one can be trusted."

Reflex "H" (Condemn Self, Withdraw)

Therapist and client "H"

C: "I feel worthless."

T: "You wouldn't feel that way if I were a good therapist."

Client-to-other "H"

C: "I guess I should have confronted him, but I didn't know what to say, so I left."

Reflex "I" (Submit, Defer, Obey)

Therapist and client "I"

1. Client or therapist submits more to avoid confrontation

than to accept a statement because of its validity. This sometimes occurs after an argument, or to end an argument.

2. Client expresses extreme helplessness, inability to cope, without underlying belief that change is possible, that therapist will help.
3. "I guess so," and "yeah" responses, which are total responses, when the therapist is actually trying to elicit elaboration on something, or after therapist has made a statement about something.

Client-to-other "I"

C: "I didn't want to go to college, but Mom insisted."

C: "They take advantage of me."

Reflex "J" (Ask Opinion, Praise, Admire)

Therapist and client "J"

T: "What should I do?"

C: "You're the best therapist in the Counseling Center.

Client-to-other "J"

C: "I asked her what she would do if she were me."

C: "They're all so great--intelligent and sensitive."

Reflex "K" (Ask for Help, Depend, Trust)

Therapist and client "K"

C: "This problem arose which I hope you will help me with. . . ."

Client-to-other "K"

C: "I trust her."

C: "I depend on them."

C: "I asked him to help me repair the car."

Reflex "L" (Cooperate, Confide, Collaborate, Agree)

Therapist and client "L"

1. Client cooperates with therapist, works on problems, answers questions, elaborates on reflective or interpretive statements.

   Examples:

   T: "How old is your sister?"

   C: "She's 18."

   T: "It sounds like you have difficulty in accepting positive feelings."

   C: "Yeah, I think you're right. The other day my roommate said she liked me, and. . . ."

   Note: a. Sometimes it's difficult to discriminate between elaboration and self-stimulating conversation. In general, self-stimulating conversation is much longer, and less affect-laden. Also, the focus of self-stimulating conversation shifts frequently.

   b. When the client's agreement comes after an argument, is less sincere, and without

elaboration to support it, "I" instead of "L" should be scored.

2. Client's "yeah" statements which merely lubricate comments coming from the therapist. Examples:

   T: "You remenber last week when we were talking about sex."

   C: "Yeah."

   T: "You got very angry with me."

   C: "Yeah."

   T: "Well, I was wondering why that made you mad."

Client-to-other "L"

C: "I went over and started a conversation with her."

C: "We told each other our problems."

Reflex "M" (Affiliate, Identify With, Love)

Therapist and client "M"

T: "I really like you."

C: "I feel close to you today."

Client-to-other "M"

C: "I dated him for two years."

C: "I care a lot about my Dad."

C: "We seem to have the same feelings about everything."

Reflex "N" (Support, Sympathize, Reflect Feelings, Reassure, Generalize Conscious Feelings, Approve, Nurture, Therapeutic Probe)

Therapist and client "N"

C: "I'm sure you're intelligent, and capable of making it here." (Support, reassure)

T: "Sounds like you're very lonely, and feeling incapable of establishing any real friendships." (Reflect feelings)

T: "You said that your father really preferred your brother?" (Therapeutic probe)

C: "Looks like you're very tired today." (Sympathize)

C: "Well, I think you're doing a very good job." (Support)

Note: a. The above therapist statements are rated "N" only if he is responding to data and feelings in the previous client statements. For instance, if the third therapist statement above had come after a client had said, "I had final exams yesterday," the therapist statement would be rated "A." (Directive) As a rule of thumb, reflecting feelings, therapeutic probes, generalizing feelings, when rated "N" must come after a client statement which contained that data that is reflected, generalized, etc. Of course, support and reassurance, to be rated, does not suffer this limitation. The client statement above is rated "N" if it seems genuinely sympathetic; the fact that it may be prompted by guilt over receiving help is irrelevant to the rating system.

b. Reassurance occasionally turns into an argumentative, competitive exchange, in which the first therapist statement should be rated "N," but the following ones should be rated "C." Example:

T: "I know you can handle it." (Supportive)

C: "I know I can't!" (Angry)

T: "No, you don't want to, but I know you can!"

Client-to-other "N"

C: "I told her that everything would turn out alright."

C: "I can understand her feelings about that."

Reflex "O" (Give Help, Interpret Beyond Conscious Feelings)

Therapist and client "O"

T: "If you feel up-tight next week, we could meet twice."

T: "Your relationship with your boyfriend appears to be similar to the one you had with your father."

Client-to-other "O"

C: "Mom had her hands full, so I helped her with the dishes."

C: "I wish I could help him feel better about himself."

Reflex "P" (Advise, Teach, Give Opinion, Inform

Therapist and client "P"

1. Therapist or client gives opinion, acts as authority on the state of things in the world. Examples:

   T: "The way I see myself as being helpful to you is in trying to understand you, and in the process, helping you to understand yourself."

   T: "To get some information about your interests, you should take the Strong."

   T: "You may have that feeling, but not be aware of it. It may be unconscious."

   C: "In my experience, I've found that people in this society are like that."

   C: "To make money farming, you have to do most of the work yourself. If you hire people to work for you, your expenses will be greater than your income."

   Note: a. "P" is often scored after "C" in the same statement (Example: "No, I don't really feel that way. The way I feel is. . . ."). Of course, if rejection is not followed by explanation, "P" would not be scored. If the whole statement is a rejection of the previously stated point of view, with an argument as to

the speaker's point of view is correct, or just an assertion that he is right, the whole thing should be scored "C." "C . . . "A" or "C" . . . "B" might also be scored (i.e., rejection might be followed by a change of subject or self-stimulating conversation).

b. Sometimes, statements of the way things are in the world are made to reassure, and should therefore be scored "N" instead of "P." Example:

C: "I really feel like I'm coming apart!"

T: "When people begin to change, they often feel like they're disintegrating. That seems to be what's happening to you."

Client-to-other "P"

C: "I taught him how to water ski."

C: "When he asked for my advice, I told him what I would do."

Reflex "A" (Dominate, Direct, Command, Diagnostic Probe, Independent Behavior)

Therapist and client "A"

1. Therapist or client changes subject, begins new topic.

Note: Occasionally, a change of subject should not be rated "A." Example:

C: "Yes, I do have finals next week. (pause) I hate you."

In this example, strong emotion is expressed in the change of subject. In this case, the rating would be "L" . . . "E."

2. Therapist asks questions of an information-gathering kind.

   Example:

   T: "How old are you?"

3. Therapist or client is dominating, bossy. Example:

   T: "Do your studying between three and six o'clock." (When no advice was asked for)

Client-to-other "A"

C: "I said, 'Judy, quit school and go to work.'"

C: "I decided to leave my parents, because I felt it was time for me to stop depending on them so much."

REFERENCES

Adams, H. B. Mental illness or interpersonal behavior? American Psychologist, 1964, 19, 191-197.

Alexander, F., & French, T. M. Psychoanalytic therapy. New York: Ronald Press, 1946.

Bales, R. F. Interaction process analysis. Cambridge, Mass.: Addison-Wesley Press, 1950.

Berne, E. Transactional analysis of psychotherapy. New York: Grove Press, 1961.

Chance, E. Families in treatment. New York: Basic Books, 1959.

Claxton, D. Client displacement and therapist accurate empathy. Unpublished Honors Thesis, University of Florida, 1972.

Cronbach, L. J., & Gleser, C. Assessing similarity between profiles. Psychological Bulletin, 1953, 50, 456-473.

Crowder, James E. The relationship between therapist and client interpersonal behaviors and psychotherapy outcome. Journal of Counseling Psychology, 1972, 19, 68-75.

Dittman, A. T. Problems of reliability on observing and coding social interactions. Journal of Consulting Psychology, 1958, 22, 430.

Foa, V. G. Convergence in the analysis of the structure of interpersonal behavior. Psychological Review, 1961, 5, 341-355.

Framo, J. L. Systematic research on family dynamics. In I. Boszormenyi-Nagy & J. Framo (Eds.), Intensive family therapy, Ch. 11. New York: Harper and Row, 1965.

Freedman, M. B., Leary, T. F., Ossorio, A. B., & Coffey, H. S. The interpersonal dimension of personality. Journal of Personality, 1951, 20, 143-161.

Freud, S. Beyond the pleasure principle (1920). New York: Bantam Books, 1963.

Glad, D. D. Operational values in psychotherapy. New York: Oxford University Press, 1959.

Guerney, B., & Guerney, L. Analysis of interpersonal relationships as an aid to understanding family dynamics: A case report. Journal of Clinical Psychology, 1961, 17, 225-228.

Henry, J. Family structure and the transmission of neurotic behavior. American Journal of Orthopsychiatry, 1951, 21, 800-818.

Hyman, R., & Berger, L. The effects of psychotherapy: Discussion. International Journal of Psychotherapy, 1965, 1, 317-322.

Kell, B. L., & Mueller, W. J. Impact and change: A study of counseling relationships. New York: Appleton-Century-Crofts, 1966.

LaForge, R., Leary, T. F., Naboisek, H., Coffey, H. S., & Freedman, M. B. The interpersonal dimension of personality. II. An objective study of repression. Journal of Personality, 1954, 23, 129-153.

LaForge, R., & Suczek, R. The interpersonal dimension of personality. III. An interpersonal checklist. Journal of Personality, 1955, 24, 94-112.

Leary, T. F. The theory and measurement methodology of interpersonal communication. Psychiatry, 1955, 18, 147-161.

Leary, T. F. Interpersonal diagnosis of personality. New York: Ronald Press, 1957.

Luckey, E. B. Marital satisfaction and congruent self-spouse concepts. Social Forces, 1960a, 39, 153-157.

Luckey, E. B. Marital satisfaction and its association with congruency of perception. Marriage and Family Living, 1960b, 22, 49-54.

Luckey, E. B. Perceptual congruence of self and family concepts as related to marital interaction. Sociometry, 1961, 24, 234-250.

MacKenzie, M. The interpersonal behavior of normal and clinic family members. Doctoral dissertation, Michigan State University, 1968.

Mitchell, H. E. Application of the Kaiser method to marital pairs. Family Process, 1963, 2, 265-279.

Mueller, W. J. Anxiety level, inferred identification, and response tendencies on a sematic differential. Journal of Counseling Psychology, 1966, 144-152.

Mueller, W. J. Mapping the psychotherapeutic process through analysis of interpersonal behaviors. Paper presented at the meeting of the American Psychological Association, Washington, D. C., September, 1969a.

Mueller, W. J. Patterns of behavior and their reciprocal impact in the family and in psychotherapy. Journal of Counseling Psychology, 16 (No. 2, Part 2), 1969b.

Mueller, W. J., & Dilling, C. A. Therapist-client interview behavior and personality characteristics of therapists. Journal of Projective Techniques and Personality Assessment, 1968, 32, 281-288.

Mueller, W. J., & Dilling, C. A. Studying interpersonal themes in psychotherapy research. Journal of Counseling Psychology, 1969, 16, 50-58.

Parsons, T. Family structure and the socialization of the child. In T. Parsons & R. F. Bales (eds.), Family, Socialization and Interaction Process. Glencoe, Ill.: Free Press, 1951.

Raush, H. L., Dittman, A. T., & Taylor, T. J. The interpersonal behavior of children in residential treatment. Journal of Abnormal and Social Psychology, 1959, 58, 9-26.

Raush, H. L., Dittman, A. T., & Llewellyn, L. G. Person, setting, and change in social interaction. II. A normal control study. Human Relations, 1960, 13, 305-333.

Sahakian, W. (Ed.). Psychotherapy and counseling: Studies in technique. Chicago: Rand-McNally, 1969.

Schaefer, C. S. Converging conceptual models for maternal behavior and for child behavior. In J. C. Glidwell (Ed.), Parental attitudes and child behavior. Springfield, Ill.: Thomas, 1961.

Siegel, S. Nonparametric statistics. New York: McGraw-Hill, 1956.

Sullivan, H. S. Conceptions of modern psychiatry. New York: Norton, 1947.

Terrill, J. M., & Terrill, R. A method for studying family communication. Family Process, 1965, 4, 259-290.

Tinker, R. Terrill and Terrill's method for studying family communication: Does it provide a meaningful abbreviation of communication? Unpublished Master's Thesis, Michigan State University, 1967.

BIOGRAPHICAL SKETCH

Brian Edgar Warren was born May 8, 1946, in Clifton Forge, Virginia. In June, 1964, he was graduated from Francis C. Hammond High School in Alexandria, Virginia. In June, 1968, he was graduated from Randolph-Macon College with the degree of Bachelor of Arts with Honors in Psychology. In September, 1968, he began graduate work in the University of Florida Department of Psychology. He was a United States Public Health Service Trainee in Clinical Psychology until June, 1969, and a Graduate School Fellow until June, 1970, when he received the Master of Arts degree with a major in Psychology. He was granted a United States Public Health Service Traineeship for the academic year 1970-71. Beginning in June, 1971, until the present, he has been an Intern in Counseling Psychology at the University of Florida Counseling Center and an Intern in Clinical Psychology at the Shands Psychology Clinic of the J. Hillis Miller Health Center.

Brian Edgar Warren is married to the former Joanne Frances Turner. He is a member of Alpha Epsilon Pi, Omicron Delta Kappa, Pi Gamma Mu, Phi Beta Kappa, and Chi Beta Phi.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Harry A. Grater, Jr., Chairman
Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Hugh G. Davis
Professor of Clinical Psychology
and Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Vernon Van De Riet
Assistant Professor of Clinical
Psychology and Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Franz R. Epting
Associate Professor of Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Donald Avila
Professor of Education

This dissertation was submitted to the Department of Psychology in the College of Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1972

Dean, Graduate School